

## ABSTRACT OF THE DISCLOSURE

A head tracker system for determining a user's head orientation relative to a datum (22) comprises: a head mounting (2) for attachment to the user's head; an optical sensor (12) which in use is located in fixed relation with a known fixed point relative to the head mounting (2) and a plurality of distinguishable markings (18a-18j) each of which when in use is located in fixed relation with a respective known point which is fixed relative to the datum (22). The head tracker further comprises an optical correlator (26) for optically correlating the optical image from the optical sensor (12) with an optical image representative of at least one of said markings (18a-18j); and means (28) for determining the orientation of the head mounting using the output from the optical correlator when it detects that there is correlation between the images.